

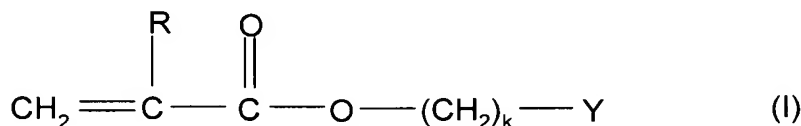
IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A radiation-curable coating composition comprising

- a) at least one aliphatic urethane (meth)acrylate which has two ethylenically unsaturated double bonds per molecule and comprises at least one polytetrahydrofurandiol having a number average molecular weight M_n of at least 500 g/mol, and which is obtainable by reacting i) at least one aliphatic compound or an aliphatic prepolymer having at least two isocyanate groups (component a1) with ii) at least one compound having at least one reactive OH group and at least one ethylenically unsaturated double bond (component a2), iii) at least one polytetrahydrofurandiol having a number average molecular weight M_n of at least 500 g/mol and optionally iv) one or more aliphatic compounds having at least one reactive OH group (component a4), and wherein the ratio of the sum of the OH groups from components a2, a3 and a4 to the NCO groups from component a1 is greater than or equal to 1, and
- b) at least one monoethylenically unsaturated reactive diluent comprising at least one aliphatic heterocycle,

wherein the component b) is a compound of the formula I



wherein

R is selected from the group consisting of H and CH₃,

k is from 0 to 4, and

Y is a 5- or 6-membered, saturated heterocycle comprising one or two oxygen atoms, with the heterocycle being able to be unsubstituted or substituted by C₁-C₄-alkyl.

Claim 2 (Previously Presented): The coating composition as claimed in Claim 1 which further comprises as component c) a bifunctional or polyfunctional ester of an α,β -ethylenically unsaturated carboxylic acid with a diol or polyol.

Claim 3 (Previously Presented): The coating composition as claimed in Claim 2 comprising from 20 to 90% by weight of the component a), from 10 to 80% by weight of the component b), from 0 to 50% by weight of the component c) and up to 50% by weight, based on the total weight of the components a), b) and c), of at least one auxiliary, with the proviso that the percentages by weight of the components a), b) and c) add up to 100% by weight.

Claim 4 (Previously Presented): The coating composition as claimed in Claim 2 which, based on the total weight of the components a), b) and c), further comprises:

- d) from 0 to 10% by weight of at least one photoinitiator,
- e) from 0 to 5% by weight of at least one UV absorber,
- f) from 0 to 5% by weight of at least one free-radical scavenger, and
- g) from 0 to 10% by weight of at least one additive.

Claim 5 (Previously Presented): The coating composition as claimed in claim 1, wherein the component b) is selected from the group consisting of trimethylolpropane monoformal acrylate, glycerol monoformal acrylate, 4-tetrahydropyranyl acrylate, 2-tetrahydropyranyl methylacrylate and tetrahydrofurfuryl acrylate.

Claim 6 (Previously Presented): The coating composition as claimed in Claim 2, wherein the component c) is selected from the group consisting of diacrylates and dimethacrylates of aliphatic diols.

Claims 7-8 (Canceled).

Claim 9 (Currently Amended): A process for producing a coated substrate, which comprises

- applying the coated composition as claimed in Claim 1 to the surface of a substrate,
- [[,]] optionally, drying the applied coating composition at elevated temperatures, and
- curing the coating composition by irradiation with UV radiation or an electron beam, to form the coated substrate.

Claim 10 (Previously Presented): A coated substrate obtained by the process of Claim 9.

Claim 11 (Currently Amended): The process of Claim [[10]] 9, wherein the substrate surface comprises wood, plastic, paper, leather, metal, or combinations thereof.

Claim 12 (Currently Amended): The process of Claim [[10]] 9, comprising drying the applied coating composition at elevated temperatures.

Claim 13 (Previously Presented): A process for producing a coated substrate, which comprises

applying the coated composition as claimed in Claim 2 to the surface of a substrate, optionally, drying the applied coating composition at elevated temperatures, and curing the coating composition by irradiation with UV radiation or an electron beam, to form the coated substrate.

Claim 14 (Previously Presented): A coated substrate obtained by the process of Claim 13.

Claim 15 (Previously Presented): The process of Claim 13, wherein the substrate surface comprises wood, plastic, paper, leather, metal, or combinations thereof.

Claim 16 (Previously Presented): The process of Claim 13, comprising drying the applied coating composition at elevated temperatures

Claim 17 (Previously Presented): A process for producing a coated substrate, which comprises

applying the coated composition as claimed in Claim 3 to the surface of a substrate, optionally, drying the applied coating composition at elevated temperatures, and curing the coating composition by irradiation with UV radiation or an electron beam, to form the coated substrate.

Claim 18 (Previously Presented): A coated substrate obtained by the process of Claim 17.

Claim 19 (Previously Presented): The process of Claim 17, wherein the substrate surface comprises wood, plastic, paper, leather, metal, or combinations thereof.

Claim 20 (Previously Presented): The process of Claim 17, comprising drying the applied coating composition at elevated temperatures.

Claim 21 (Previously Presented): A process for producing a coated substrate, which comprises

applying the coated composition as claimed in Claim 4 to the surface of a substrate, optionally, drying the applied coating composition at elevated temperatures, and curing the coating composition by irradiation with UV radiation or an electron beam, to form the coated substrate.

Claim 22 (Currently Amended): A coated substrate obtained by the process of Claim 21.

Claim 23 (New): The coating composition as claimed in claim 1, wherein the component b) is trimethylolpropane monoformal acrylate.

Claim 24 (New): The coating composition as claimed in claim 1, wherein the component a1) is isophorone diisocyanate.